

CLAIMS

What the invention claimed is:

1. A method in a computing environment for effecting a controlled, recurring assessment of a care episode and service utilization patterns on a county or local level, the method comprising the steps of:

accessing transmissions data received from a plurality of corresponding institutions;

totalizing said proband counts;

transforming the distance values, measured in miles (kilometers) or elapsed time from inception of clinical event to securing appropriate care at a health facility in the catchment area, using a power transform;

transforming the population values for the locale where each care episode originates, measured in persons or persons per square mile (square kilometer);

standardizing, by scaling the raw distance and population values according to the standard deviations and signs of the respective distributions;

weighting the standardized transformed distance and population values and summing to form a provisional index;

standardizing the provisional index, by scaling according to the standard deviation of the provisional index;

iteratively seeking optimal values of power transform exponents λ_1 and λ_2 , such that the Anderson-Darling measure of deviation from normality is minimized and close to zero;

applying the resultant values transform exponents λ_1 and λ_2 , to produce an optimized distance index d for each case;

analyzing the distribution of d values to ascertain an optimal binning into N distance categories, d_{cat} ; and

risk-adjusting the incidence rates of clinical indicators of access and utilization of health services using the categorized locally transformed normed distance index, d_{cat} , and age and, optionally, other variables, so as to produce an accurate representation of differences in access to health services taking time and distance into account.